

TREC-IS 2019-B Notebook Evaluator v2.3  
Run: irlabISIDeep (irlabISIDeep.run)

EVALUATION: Alertng Performance

Overall performance

```
> High Importance Alert Worth: -0.379827089337176
> Low Importance Alert Worth: -0.08763274145527314
> Accumulated Alert Worth: -0.23372991539622456
```

EVALUATION: Information Type Categorization

Overall performance

```
> Information Type Precision (positive class, multi-type, macro): 0.22717645202448966
> Information Type Recall (positive class, multi-type, macro): 0.18989966446278864
> Information Type F1 (positive class, multi-type, macro): 0.18233186849862867
> Information Type Accuracy (overall, multi-type, macro): 0.8764845864989956
> High Importance Information Type Precision (positive class, multi-type, macro): 0.1516346790754849
> High Importance Information Type Recall (positive class, multi-type, macro): 0.06093214258493674
> High Importance Information Type F1 (positive class, multi-type, macro): 0.08564448277008774
> High Importance Information Type Accuracy (overall, multi-type, macro): 0.9752423369138067
> Low Importance Information Type Precision (positive class, multi-type, macro): 0.2523570430074912
> Low Importance Information Type Recall (positive class, multi-type, macro): 0.2328883842207253
> Low Importance Information Type F1 (positive class, multi-type, macro): 0.21456099707480897
> Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8435653363607254
```

EVALUATION: Information Priority Level

Overall Performance

```
> Priority Estimation Error (mean squared error, macro): 0.08331287922729594
> Priority Estimation Error High Importance (mean squared error, macro): 0.11324812705179842
> Priority Estimation Error Low Importance (mean squared error, macro): 0.0733344632857951
```

LATEX

```
irlabISIDeep & -0.3798 & -0.2337 & 0.0856 & 0.1464 & 0.8765 & 0.1132 & 0.0833 \\
```

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EVALUATION: Information Type Categorization (Multi-type)  
Per Event Performance

floodChoco2019

Information Type Precision (positive class, multi-type, macro): 0.0451056094596451  
Information Type Recall (positive class, multi-type, macro): 0.05382178421683138  
Information Type F1 (positive class, multi-type, macro): 0.02275091469797851  
Information Type Accuracy (overall, multi-type, macro): 0.9098114824335902  
High Importance Information Type Precision (positive class, multi-type, macro): 0.0  
High Importance Information Type Recall (positive class, multi-type, macro): 0.0  
High Importance Information Type F1 (positive class, multi-type, macro): 0.0  
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9867180805484147  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.06014081261286013  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.07176237895577517  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.030334552930638012  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.884175949728649

earthquakeCalifornia2014

Information Type Precision (positive class, multi-type, macro): 0.10727922569510617  
Information Type Recall (positive class, multi-type, macro): 0.10468489056812941  
Information Type F1 (positive class, multi-type, macro): 0.06896015858839134  
Information Type Accuracy (overall, multi-type, macro): 0.874015748031496  
High Importance Information Type Precision (positive class, multi-type, macro): 0.0  
High Importance Information Type Recall (positive class, multi-type, macro): 0.0  
High Importance Information Type F1 (positive class, multi-type, macro): 0.0  
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9776902887139108  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.1430389675934749  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.1395798540908392  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.09194687811785512  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8394575678040246

earthquakeBohol2013

Information Type Precision (positive class, multi-type, macro): 0.194645326982389  
Information Type Recall (positive class, multi-type, macro): 0.1928718084696397  
Information Type F1 (positive class, multi-type, macro): 0.16291422070014372  
Information Type Accuracy (overall, multi-type, macro): 0.8953957996768983  
High Importance Information Type Precision (positive class, multi-type, macro): 0.017543859649122806  
High Importance Information Type Recall (positive class, multi-type, macro): 0.1111111111111111  
High Importance Information Type F1 (positive class, multi-type, macro): 0.030303030303030304  
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9886914378029078  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.25367914942681113  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.2201253742558159  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.20711795083251483  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8642972536348952

hurricaneFlorence2018

Information Type Precision (positive class, multi-type, macro): 0.2081793739547209  
Information Type Recall (positive class, multi-type, macro): 0.16847368542495547  
Information Type F1 (positive class, multi-type, macro): 0.1538017279809307  
Information Type Accuracy (overall, multi-type, macro): 0.8837034813925567  
High Importance Information Type Precision (positive class, multi-type, macro): 0.2155571357623369  
High Importance Information Type Recall (positive class, multi-type, macro): 0.06674571561400834  
High Importance Information Type F1 (positive class, multi-type, macro): 0.09949459925188081  
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9718554088301987  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.2057201200188489  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.20238300869527118  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.1719041042239473  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8543195055800098

shootingDallas2017

Information Type Precision (positive class, multi-type, macro): 0.10201809815450348  
Information Type Recall (positive class, multi-type, macro): 0.1011507348187508  
Information Type F1 (positive class, multi-type, macro): 0.07582695456180949  
Information Type Accuracy (overall, multi-type, macro): 0.8986249999999999  
High Importance Information Type Precision (positive class, multi-type, macro): 0.015503875968992248  
High Importance Information Type Recall (positive class, multi-type, macro): 0.037037037037037035  
High Importance Information Type F1 (positive class, multi-type, macro): 0.021857923497267756  
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9941666666666666  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.13085617221634055  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.12252196741265536  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.09381663158332341  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8667777777777777

fireYMM2016

Information Type Precision (positive class, multi-type, macro): 0.2373898763420521  
Information Type Recall (positive class, multi-type, macro): 0.17122592270502188  
Information Type F1 (positive class, multi-type, macro): 0.1463741903710536  
Information Type Accuracy (overall, multi-type, macro): 0.8474791666666667

High Importance Information Type Precision (positive class, multi-type, macro): 0.12733830845771144  
High Importance Information Type Recall (positive class, multi-type, macro): 0.03841498021842451  
High Importance Information Type F1 (positive class, multi-type, macro): 0.054000814000814  
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9540000000000001  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.27407373230349896  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.215496236867221  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.17716531582780015  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.811972222222223

EVALUATION: Information Type Categorization (Multi-type)  
Per Information Type Performance

Request-GoodsServices

	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	7611
Request-GoodsServices	0.43	0.13	0.20	23
micro avg	1.00	1.00	1.00	7634
macro avg	0.71	0.56	0.60	7634
weighted avg	1.00	1.00	1.00	7634

Request-SearchAndRescue

	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	7624
Request-SearchAndRescue	0.00	0.00	0.00	10
micro avg	1.00	1.00	1.00	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	1.00	1.00	1.00	7634

Request-InformationWanted

	precision	recall	f1-score	support
Other Classes	0.99	1.00	0.99	7563
Request-InformationWanted	0.00	0.00	0.00	71
micro avg	0.99	0.99	0.99	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	0.98	0.99	0.99	7634

CallToAction-Volunteer

	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	7610
CallToAction-Volunteer	0.25	0.08	0.12	24
micro avg	1.00	1.00	1.00	7634
macro avg	0.62	0.54	0.56	7634
weighted avg	0.99	1.00	1.00	7634

CallToAction-Donations

	precision	recall	f1-score	support
Other Classes	1.00	0.99	0.99	7556
CallToAction-Donations	0.47	0.56	0.51	78
micro avg	0.99	0.99	0.99	7634
macro avg	0.73	0.78	0.75	7634
weighted avg	0.99	0.99	0.99	7634

CallToAction-MovePeople

	precision	recall	f1-score	support
Other Classes	0.99	1.00	0.99	7526
CallToAction-MovePeople	0.00	0.00	0.00	108
micro avg	0.99	0.99	0.99	7634
macro avg	0.49	0.50	0.50	7634
weighted avg	0.97	0.99	0.98	7634

Report-FirstPartyObservation

	precision	recall	f1-score	support
Other Classes	0.94	0.86	0.90	7150
Report-FirstPartyObservation	0.09	0.21	0.13	484
micro avg	0.82	0.82	0.82	7634
macro avg	0.52	0.54	0.52	7634
weighted avg	0.89	0.82	0.85	7634

Report-ThirdPartyObservation		precision	recall	f1-score	support
Other Classes	0.96	0.81	0.88	7317	
Report-ThirdPartyObservation	0.06	0.31	0.11	317	
micro avg	0.79	0.79	0.79	7634	
macro avg	0.51	0.56	0.49	7634	
weighted avg	0.93	0.79	0.85	7634	
Report-Weather		precision	recall	f1-score	support
Other Classes	0.97	0.97	0.97	7334	
Report-Weather	0.33	0.33	0.33	300	
micro avg	0.95	0.95	0.95	7634	
macro avg	0.65	0.65	0.65	7634	
weighted avg	0.95	0.95	0.95	7634	
Report-EmergingThreats		precision	recall	f1-score	support
Other Classes	0.94	0.98	0.96	7168	
Report-EmergingThreats	0.21	0.10	0.13	466	
micro avg	0.92	0.92	0.92	7634	
macro avg	0.58	0.54	0.55	7634	
weighted avg	0.90	0.92	0.91	7634	
Report-NewSubEvent		precision	recall	f1-score	support
Other Classes	0.98	0.99	0.99	7492	
Report-NewSubEvent	0.16	0.10	0.12	142	
micro avg	0.97	0.97	0.97	7634	
macro avg	0.57	0.54	0.56	7634	
weighted avg	0.97	0.97	0.97	7634	
Report-MultimediaShare		precision	recall	f1-score	support
Other Classes	0.83	0.91	0.87	6034	
Report-MultimediaShare	0.49	0.31	0.38	1600	
micro avg	0.79	0.79	0.79	7634	
macro avg	0.66	0.61	0.63	7634	
weighted avg	0.76	0.79	0.77	7634	
Report-ServiceAvailable		precision	recall	f1-score	support
Other Classes	0.98	0.99	0.99	7484	
Report-ServiceAvailable	0.11	0.04	0.06	150	
micro avg	0.97	0.97	0.97	7634	
macro avg	0.54	0.52	0.52	7634	
weighted avg	0.96	0.97	0.97	7634	
Report-Factoid		precision	recall	f1-score	support
Other Classes	0.89	0.90	0.90	6625	
Report-Factoid	0.30	0.28	0.29	1009	
micro avg	0.82	0.82	0.82	7634	
macro avg	0.60	0.59	0.59	7634	
weighted avg	0.81	0.82	0.82	7634	
Report-Official		precision	recall	f1-score	support

Other Classes	0.97	0.99	0.98	7404
Report-Official	0.23	0.07	0.11	230
micro avg	0.96	0.96	0.96	7634
macro avg	0.60	0.53	0.55	7634
weighted avg	0.95	0.96	0.96	7634

Report-News				
	precision	recall	f1-score	support
Other Classes	0.87	0.76	0.81	6158
Report-News	0.35	0.53	0.42	1476
micro avg	0.72	0.72	0.72	7634
macro avg	0.61	0.65	0.62	7634
weighted avg	0.77	0.72	0.74	7634

Report-CleanUp				
	precision	recall	f1-score	support
Other Classes	0.99	1.00	0.99	7559
Report-CleanUp	0.00	0.00	0.00	75
micro avg	0.99	0.99	0.99	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	0.98	0.99	0.99	7634

Report-Hashtags				
	precision	recall	f1-score	support
Other Classes	0.50	0.93	0.65	3789
Report-Hashtags	0.50	0.07	0.12	3845
micro avg	0.50	0.50	0.50	7634
macro avg	0.50	0.50	0.39	7634
weighted avg	0.50	0.50	0.38	7634

Report-OriginalEvent				
	precision	recall	f1-score	support
Other Classes	0.89	0.98	0.93	6750
Report-OriginalEvent	0.22	0.05	0.08	884
micro avg	0.87	0.87	0.87	7634
macro avg	0.55	0.51	0.51	7634
weighted avg	0.81	0.87	0.83	7634

Other-ContextualInformation				
	precision	recall	f1-score	support
Other Classes	0.96	0.90	0.93	7364
Other-ContextualInformation	0.03	0.09	0.05	270
micro avg	0.88	0.88	0.88	7634
macro avg	0.50	0.49	0.49	7634
weighted avg	0.93	0.88	0.90	7634

Other-Advice				
	precision	recall	f1-score	support
Other Classes	0.95	0.96	0.95	7183
Other-Advice	0.23	0.20	0.22	451
micro avg	0.91	0.91	0.91	7634
macro avg	0.59	0.58	0.58	7634
weighted avg	0.91	0.91	0.91	7634

Other-Sentiment				
	precision	recall	f1-score	support
Other Classes	0.89	0.73	0.80	5844
Other-Sentiment	0.44	0.71	0.55	1790
micro avg	0.72	0.72	0.72	7634
macro avg	0.67	0.72	0.67	7634

weighted avg	0.79	0.72	0.74	7634
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Other-Discussion	precision	recall	f1-score	support
Other Classes	0.92	0.91	0.92	7064
Other-Discussion	0.04	0.05	0.04	570
micro avg	0.85	0.85	0.85	7634
macro avg	0.48	0.48	0.48	7634
weighted avg	0.86	0.85	0.85	7634

Other-Irrelevant	precision	recall	f1-score	support
Other Classes	0.70	0.82	0.75	5013
Other-Irrelevant	0.48	0.33	0.39	2621
micro avg	0.65	0.65	0.65	7634
macro avg	0.59	0.57	0.57	7634
weighted avg	0.62	0.65	0.63	7634